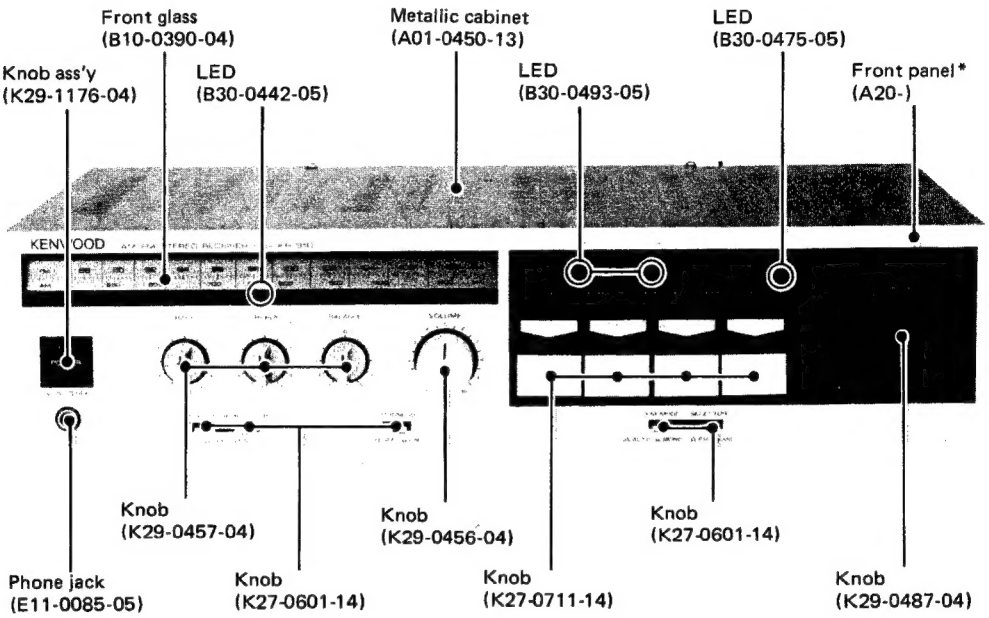
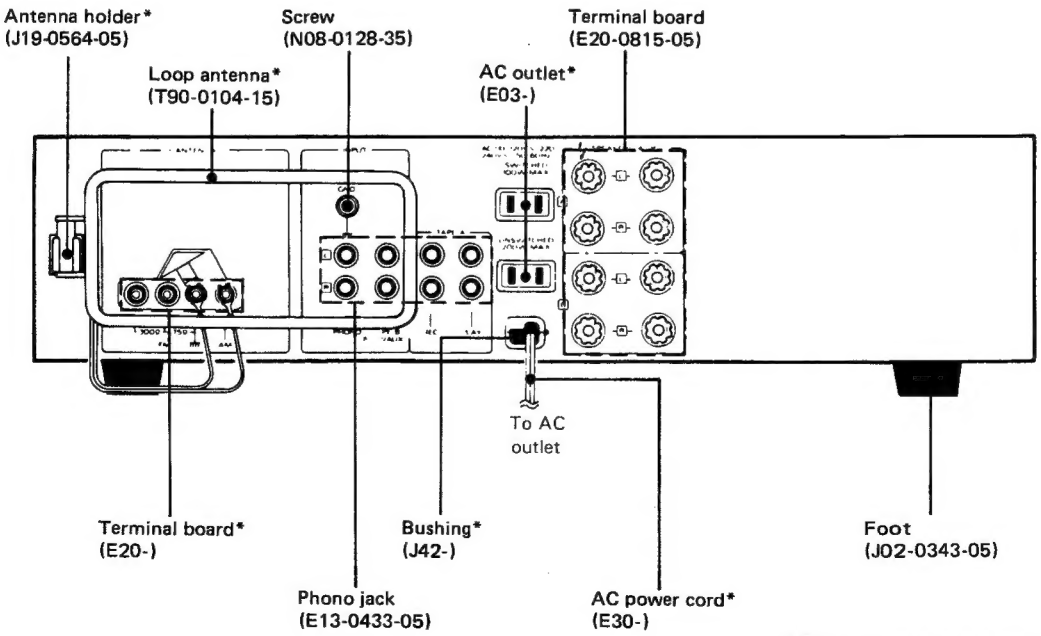
SERVICE MANUAL

KENWOOD

KR-910
KR-910L

AM-FM STEREO RECEIVER

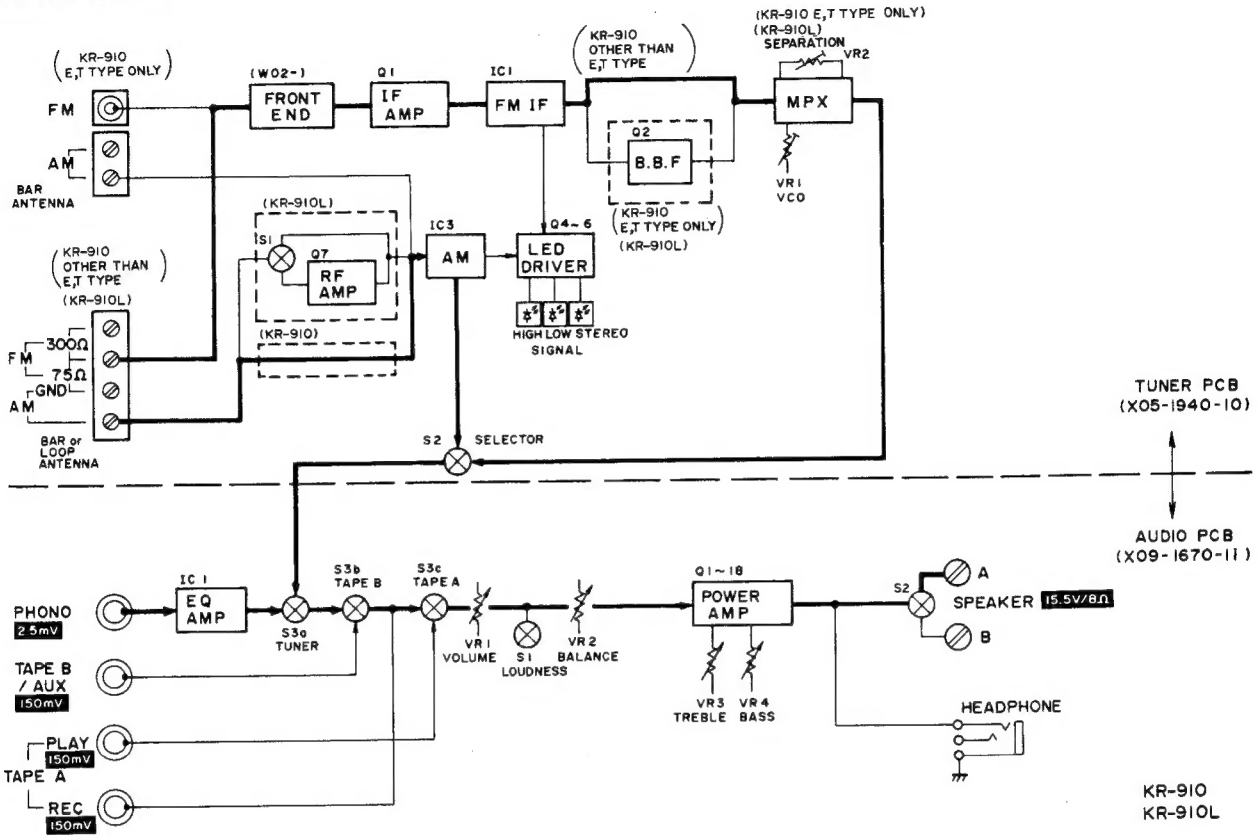




* Refer to parts list on page 12.
Photo is KR-910.

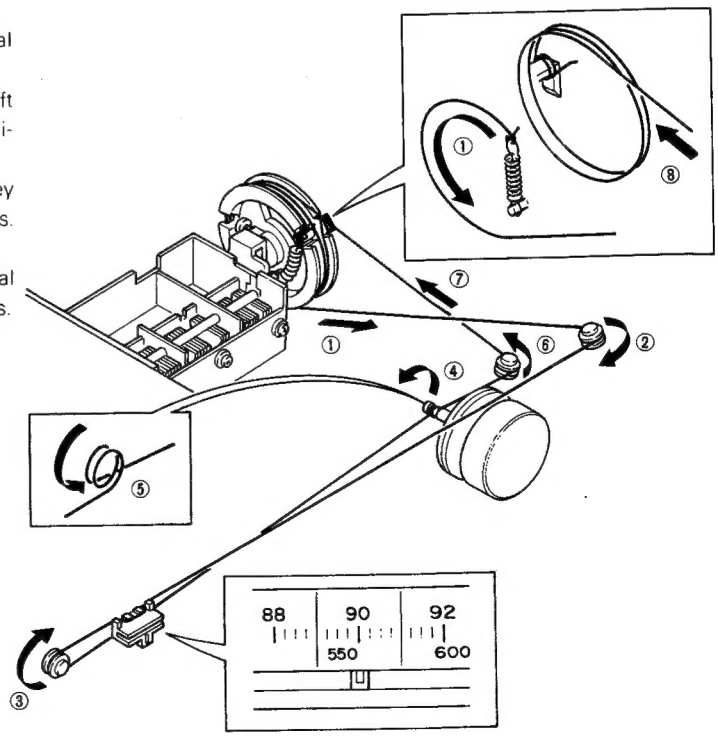
BLOCK DIAGRAM/DIAL CORD STRINGING

BLOCK DIAGRAM



DIAL CORD STRINGING

1. Tie the end of the dial cord to the spring. Dress the dial cord in the direction ① through ④.
2. Wind the dial cord two turns around the dial shaft starting from its lower side. Dress the dial cord in the direction ⑤ through ⑦.
3. Wind the dial cord two turns around the dial pulley starting from its upper side. Fix the dial cord to the boss. (⑧)
4. Receive a 90 MHz signal and then mount the dial pointer at the 90 MHz position of the dial calibrations.



ADJUSTMENT

NO.	ITEM	INPUT SETTINGS	OUTPUT SETTINGS	RECEIVER SETTINGS	ALIGNMENT POINTS	ALIGN FOR	FIG.
FM SECTION			INPUT SELECTOR: FM MODE: STEREO				
1	**DISCRIMINATOR (1)**	(A) 98.0 MHz 1 kHz ± 75 kHz dev	(B)	MONO 98.0 MHz	TUNING KNOB	Adjust the tuning knob so that the same amount of noise is observed at the top and bottom of the output waveform with a weak signal.	
2	**DISCRIMINATOR (2)**	(A) 98.0 MHz 1 kHz ± 75 kHz dev 60 dB (ANT input)	Connect a DC voltmeter across R18.	MONO 98.0 MHz	L6	0V	(a)
3	**DISCRIMINATOR (3)**	(A) 98.0 MHz 1 kHz ± 75 kHz dev 60 dB (ANT input)	(B)	MONO 98.0 MHz	L7	Minimum distortion	
		Repeat alignments 2 and 3 several times.					
4	**VCO**	(A) 98.0 MHz 0 dev 60 dB (ANT input)	Connect a resistor (330 kΩ) to the junction of VR1 and R46 and connect a frequency counter via an AC voltmeter.	98.0 MHz	VR1	Frequency: 76.00 kHz	(b)
		VCO: Voltage Controlled Oscillator					
5	**SEPARATION**	(C) 98.0 MHz 1 kHz ± 68.25 kHz dev Selector: L or R Pilot: ± 6.75 kHz dev 60 dB (ANT input)	(B)	98.0 MHz	VR2	Minimum crosstalk. A compromise adjustment may be required if left-to-right and right-to-left separations are unequal.	
6	**DISTORTION (STEREO)**	(C) 98.0 MHz 1 kHz ± 68.25 kHz dev Selector: L or R Pilot: ± 6.75 kHz dev 60 dB (ANT input)	(B)	98.0 MHz	T1 (Front end)	Minimum distortion	
AM SECTION (KR-910)		Keep the loop antenna installed.		INPUT SELECTOR: AM			
(1)	**IF TRANSFORMER**	(D) 1000 kHz 400 Hz, 30% mod	(B)	1000 kHz	L8	Maximum amplitude and symmetry of the oscilloscope display.	
(2)	**RF ALIGNMENT (1)**	(D) 600 kHz 400 Hz, 30% mod	(B)	600 kHz	L2, 3	Maximum amplitude and symmetry of the oscilloscope display.	
(3)	**RF ALIGNMENT (2)**	(D) 1400 kHz 400 Hz, 30% mod	(B)	1400 kHz	TC1, 2 (Front end)	Maximum amplitude and symmetry of the oscilloscope display.	
		Repeat alignments (2) and (3) several times.					
AM-MW SECTION (KR-910L)			SELECTOR: AM				
(1)	**IF TRANSFORMER**	(D) 1000 kHz 400 Hz, 30% mod	(B)	1000 kHz	L8	Maximum amplitude and symmetry of the oscilloscope display.	
(2)	**RF ALIGNMENT (MW) (1)**	(D) 600 kHz 400 Hz, 30% mod	(B)	600 kHz	AM ferrite bar antenna (A) L3	Maximum amplitude and symmetry of the oscilloscope display.	
(3)	**RF ALIGNMENT (MW) (2)**	(D) 1400 kHz 400 Hz, 30% mod	(B)	1400 kHz	TC1, 2 (Front end)	Maximum amplitude and symmetry of the oscilloscope display.	
		Repeat alignments (2) and (3) several times.					
AM-LW SECTION (KR-910L)			SELECTOR: AM, LW				
(4)	**RF ALIGNMENT (LW) (1)**	(D) 170 kHz 400 Hz, 30% mod	(B)	170 kHz	AM ferrite bar antenna (B) L4	Maximum amplitude and symmetry of the oscilloscope display.	
(5)	**RF ALIGNMENT (LW) (2)**	(D) 325 kHz 400 Hz, 30% mod	(B)	325 kHz	TC1, 2	Maximum amplitude and symmetry of the oscilloscope display.	
		Repeat alignments (4) and (5) several times.					

REGLAGE

N°	ITEM	REGLAGE DE L'ENTREE	REGLAGE DE LA SORTIE	REGALAGE DU AMPLI-TUNER	POINTS L'ALIGNMENT	ALIGNER POUR	FIG.
SECTION MF			SELECTEUR DES ENTRESS: FM				
1	**DISCRIMINATEUR (1)**	(A) 98,0 MHz 1 kHz ± 75 kHz dév	(B)	MONO 98,0 MHz	Bouton d'accord	Ajuster le bouton d'accord de façon que la même quantité du bruit puisse être observè au sommet et en bas de la forme d'onde de sortie sous des conditions d'alimentation de signal faible.	
2	**DISCRIMINATEUR (2)**	(A) 98,0 MHz 1 kHz ± 75 kHz dév 60 dB (Entrée ANT)	Connecter un voltmètre CC sur R18.	MONO 98,0 MHz	L6	0V	(a)
3	**DISCRIMINATEUR (3)**	(A) 98,0 MHz 1 kHz ± 75 kHz dév 60 dB (Entrée ANT)	(B)	MONO 98,0 MHz	L7	Distorsion minimale	
			Répéter les points 2 et 3 plusieurs fois.				
4	**OSCILLATEUR CONTROLE PAR LA TENSION**	(A) 98,0 MHz 0 dév 60 dB (Entrée ANT)	Connecter une resistance (330 kΩ) à la jonction de VR1 et R46 et connecter un compteur de fréquence par un voltmètre CA.	98,0 MHz	VR1	Fréquence: 76,00 kHz	(b)
5	**SEPARATION**	(C) 98,0 MHz 1 kHz ± 68,25 kHz dév Selection: L ou R Signal pilote: ± 6,75 kHz dév 60 dB (Entrée ANT)	(B)	98,0 MHz	VR2	Diaphonie minimale. Un compromis de réglage peut être nécessaire si les séparations de gauche à droite et de droite à gauche sont inégales.	
6	**DISTORSION (STEREO)**	(C) 98,0 MHz 1 kHz ± 68,25 kHz dév Selection: L ou R Signal pilote: ± 6,75 kHz dév 60 dB (Entrée ANT)	(B)	98,0 MHz	T1 (Tête H.F.)	Distorsion minimale	
SECTION MA (KR-910)		Laisser l'antenne bouche MA installée.		SELECTEUR: AM			
(1)	**TRANSFORMATEUR F.I.**	(D) 1000 kHz 400 Hz, 30% mod	(B)	1000 kHz	L8	Amplitude et symétrie maximale de láffichage de l'oscilloscope.	
(2)	**ALIGNEMENT H.T. (1)**	(D) 600 kHz 400 Hz, 30% mod	(B)	600 kHz	L2, 3	Amplitude et symétrie maximale de láffichage de l'oscilloscope.	
(3)	**ALIGNEMENT H.T. (2)**	(D) 1400 kHz 400 Hz, 30% mod	(B)	1400 kHz	TC1, 2 (Tête H.F.)	Amplitude et symétrie maximale de láffichage de l'oscilloscope.	
			Répéter les points (2) et (3) plusieurs fois.				
SECTION MA-OM (KR-910L)			SELECTEUR: AM				
(1)	**TRANSFORMATEUR F.I.**	(D) 1000 kHz 400 Hz, 30% mod	(B)	1000 kHz	L8	Amplitude et symétrie maximale de láffichage de l'oscilloscope.	
(2)	**ALIGNEMENT H.T. (MW) (1)**	(D) 600 kHz 400 Hz, 30% mod	(B)	600 kHz	Antenne MA (A) L3	Amplitude et symétrie maximale de láffichage de l'oscilloscope.	
(3)	**ALIGNMENT H.T. (MW) (2)**	(D) 1400 kHz 400 Hz, 30% mod	(B)	1400 kHz	TC1, 2 (Tête H.F.)	Amplitude et symétrie maximale de láffichage de l'oscilloscope.	
			Repéter les alignements (2) et (3) plusieurs fois.				
SECTION MA-OL (KR-910L)			SELECTEUR: AM, LW				
(4)	**ALIGNEMENT H.T. (LW) (1)**	(D) 170 kHz 400 Hz, 30% mod	(B)	170 kHz	Antenne MA (B) L4	Amplitude et symétrie maximale de láffichage de l'oscilloscope.	
(5)	**ALIGNEMENT H.T. (LW) (2)**	(D) 325 kHz 400 Hz, 30% mod	(B)	325 kHz	TC1, 2	Amplitude et symétrie maximale de láffichage de l'oscilloscope.	
			Repéter les alignments (4) et (5) plusieurs fois.				

ABGLEICH

NR.	GEGENSTAND	EINGANGS-EINSTELLUNG	AUSGANGS-EINSTELLUNG	RECEIVER-EINSTELLUNG	ABGLEICH-PUNKTE	ABGEICHEN FÜR	ABB.
UKW-EMPFANGSABTEILUNG		EINGANGSUMSCHALTER: FM					
1	**DISKRIMINATOR (1)**	(A) 98,0 MHz 1 kHz ± 75 kHz Hub	(B)	MONO 98,0 MHz	Abstimmknopf	Den Abstimmknopf so einstellen, daß an der oberen und unteren Grenze der Ausgangswellenform bei schwachem Signal dasselbe Gerausch auftritt.	
2	**DISKRIMINATOR (2)**	(A) 98,0 MHz 1 kHz ± 75 kHz hub 60 dB (ANT-Eingang)	Einen Gleichspannungsmesser über R18.	MONO 98,0 MHz	L6	0V	(a)
3	**DISKRIMINATOR (3)**	(A) 98,0 MHz 1 kHz ± 75 kHz Hub 60 dB (ANT-Eingang)	(B)	MONO 98,0 MHz	L7	Minimaler Kirrfaktor	
Abstimmungen 2 und 3 mehrere Male wiederholen.							
4	**SPANNUNGS-GEREGELTER OSZILLATOR**	(A) 98,0 MHz 0 Hub 60 dB (ANT-Eingang)	Einen Widerstand (330 kΩ) zur Verbindung von VR1 und R46 anschließen und Eine Frequenzmesser über einem Wechselspannungsmesser anschließen.	98,0 MHz	VR1	Frequenz: 76,00 kHz	(b)
5	**STEREO KANAL TRENNUNG**	(C) 98,0 MHz 1 kHz ± 68,25 kHz Hub Wähler: L oder R Pilotton: ± 6,75 kHz Hub 60 dB (ANT-Eingang)	(B)	98,0 MHz	VR2	Minimales Übersprechen. Eine Ausgleichrege lung kann notwendig sein, falls links-zu-rechts und rechts-zu-links. Trennungen ungleich sind.	
6	**KLIRRFAKTOR (STEREO)**	(C) 98,0 MHz 1 kHz ± 68,25 kHz Hub Wähler: L oder R Pilotton: ± 6,75 kHz Hub 60 dB (ANT-Eingang)	(B)	98,0 MHz	T1 (Frontende)	Minimaler Klirrfaktor	
MW-EMPFANGSABTEILUNG (KR-910)		Die MW-Rahmenantenne angebracht lassen.		WÄHLER: AM			
(1)	**ZF-ÜBERTRAGER**	(D) 1000 kHz 400 Hz, 30% mod	(B)	1000 kHz	L8	Maximale Amplitude und Symmetrie des Oszilloskopbildes.	
(2)	**HF-ABGLEICH (1)**	(D) 600 kHz 400 Hz, 30% mod	(B)	600 kHz	L2, 3	Maximale Amplitude und Symmetrie des Oszilloskopbildes	
(3)	**HF-ABGLEICH (2)**	(D) 1400 kHz 400 Hz, 30% mod	(B)	1400 kHz	TC1, 2 (Frontende)	Maximale Amplitude und Symmetrie des Oszilloskopbildes	
Abstimmungen (2) und (3) mehrere Male wiederholen.							
MW-EMPFANGSABTEILUNG (KR-910L)		WÄHLER: AM					
(1)	**ZF-ÜBERTRAGER**	(D) 1000 kHz 400 Hz, 30% mod	(B)	1000 kHz	L8	Maximale Amplitude und Symmetrie des Oszilloskopbildes.	
(2)	**HF-ABGLEICH (MW) (1)**	(D) 600 kHz 400 Hz, 30% mod	(B)	600 kHz	MW-Ferritantenne (A) L3	Maximale Amplitude und Symmetrie des Oszilloskopbildes	
(3)	**HF-ABGLEICH (MW) (2)**	(D) 1400 kHz 400 Hz, 30% mod	(B)	1400 kHz	TC1, 2 (Frontende)	Maximale Amplitude und Symmetrie des Oszilloskopbildes	
Abstimmungen (2) und (3) mehrere Male wiederholen.							
LW-EMPFANGSABTEILUNG (KR-910L)		WÄHLER: AM, LW					
(4)	**HF-ABGLEICH (LW) (1)**	(D) 170 kHz 400 Hz, 30% mod	(B)	170 kHz	MW-Ferritantenne (B) L4	Maximale Amplitude und Symmetrie des Oszilloskopbildes	
(5)	**HF-ABGLEICH (LW) (2)**	(D) 325 kHz 400 Hz, 30% mod	(B)	325 kHz	TC1, 2	Maximale Amplitude und Symmetrie des Oszilloskopbildes	
Abstimmungen (4) und (5) mehrere Male wiederholen.							

ADJUSTMENT/REGLAGE/ABGLEICH

FM FRONT END

When the FET and/or IC of the FM front end are replaced, perform the following adjustment.

(1) Set the FM-SG to 108 MHz, 1 kHz Mod, ±75 kHz Dev and connect it to the antenna terminal of the receiver.
(2) Set the dial pointer at 108 MHz.
(3) Adjust TC3, TCR and TCA so that the maximum output is derived.

When the FM front end is replaced, perform the following adjustment.

(1) Set the FM-SG to 90 MHz, 1 kHz Mod, ±75 kHz Dev 60 dB and connect it to the antenna terminal of the receiver.
(2) Receive the FM-SG signal.
(3) Fix the dial pointer at 90 MHz.

IDLE CURRENT

The idle current is determined by the resistance between the base and emitter of Q9 (Q10). In this model, fixed resistors R33 (R34) and R35 (R36) are used, instead of a trimming potentiometer, to adjust the idle current to 20 ~ 100 mA. Some units employ R33 (R34) or R35 (R36) and some units employ both R33 (R34) and R35 (R36).

When replacing the power or drive transistors, always check that the idle current is 20 ~ 100 mA.

CHECKING PROCEDURE

(1) Set the volume control to a minimum.
(2) Connect a DC voltmeter between the collectors of Q15 (Q16) and Q17 (Q18).
(3) Confirm that the DC voltmeter reading is 8.8 ~ 44 mV.
(4) If the DC voltmeter reading is not as specified, change the resistance between the base and emitter of Q9 (Q10) to obtain the specified value.

PARTIE FRONTALE FM

Si l'on remplace le FET et/ou IC, il convient d'effectuer le réglage suivant.

(1) Régler FM-SG sur 108 MHz, 1 kHz Mod, ±75 kHz Dev et connecter à la borne d'antenne du amplituner.
(2) Régler l'aiguille du cadran à 108 MHz.
(3) Régler TC3, TCR et TCA en sorte que la sortie maximale soit obtenue.

Si l'on remplace la partie frontale FM, il convient d'effectuer le réglage suivant.

(1) Régler FM-SG à 90 MHz, 1 kHz Mod, ±75 kHz Dev 60 dB et le connecter à la borne d'antenne du récepteur.
(2) Recevoir le signal FM-SG.
(3) Fixer l'aiguille du cadran à 90 MHz.

COURANT DE POLARISATION

La courant de polarisation est déterminé par la résistance entre la base et l'émetteur de Q9 (Q10). Ce modèle est équipé des résistors non réglables R33 (R34) et R35 (R36), au lieu d'un potentiomètre trimmer, pour régler le courant de polarisation sur 20 ~ 100 mA. Certains dispositifs sont équipés de R33 (R34) ou R35 (R36) et d'autres sont équipés à la fois de R33 (R34) et R35 (R36).

Lors du remplacement du transistor d'alimentation ou du transistor d'entraînement, toujours s'assurer que le courant de polarisation est de 20 ~ 100 mA.

METHODE DE VERIFICATION

(1) Régler le contrôle du volume sur le minimum.
(2) Connecter un voltmètre CC entre les collecteurs de Q15 (Q16) et Q17 (Q18).
(3) S'assurer que la lecture du voltmètre CC indique 8,8 ~ 44 mV.
(4) Si la lecture du voltmètre CC n'est pas comme spécifiée, changer la résistance entre la base et l'émetteur de Q9 (Q10) pour obtenir la valeur spécifiée.

UKW-FRONTENDE

Beim Auswechseln des FETs und/oder des ICs, die Einstellung wie folgt vornehmen.

(1) Den UKW-Signalgenerator auf 108 MHz, 1 kHz Modulation und ±75 kHz Hub einstellen und mit der Antennenklemme des steuergeräts verbinden.
(2) Den Skalenzeiger auf 108 MHz stellen.
(3) TC3, TCR und TCA so einstellen, daß der Höchstausgang erhalten wird.

Beim Auswechseln des Frontendes, die Einstellung wie folgt vornehmen.

(1) Den UKW-Signalgenerator auf 90 MHz, 1 kHz Modulation ±75 kHz Hub, und 60 dB einstellen und mit der Antennenklemme des Steuergeräts verbinden.
(2) Den Steuergeräts so einstellen, daß das Meßsendersignal empfangen wird, während der Skalenzeiger auf 90 MHz zeigt.

LEERLAUFSTROM

Der Leerlaufstrom wird durch den Wiederstand zwischen der Basis und dem Emitter von Q9 (Q10) bestimmt. Dieses Modell ist mit Festwiederstand R33 (R34) und R35 (R36) ausgestattet, an Stelle von einem Trimmpotentiometer, um den Leerlaufstrom auf 20 ~ 100 mA einzustellen. Einige Modelle sind mit R33 (R34) und R35 (R36) zusammen.

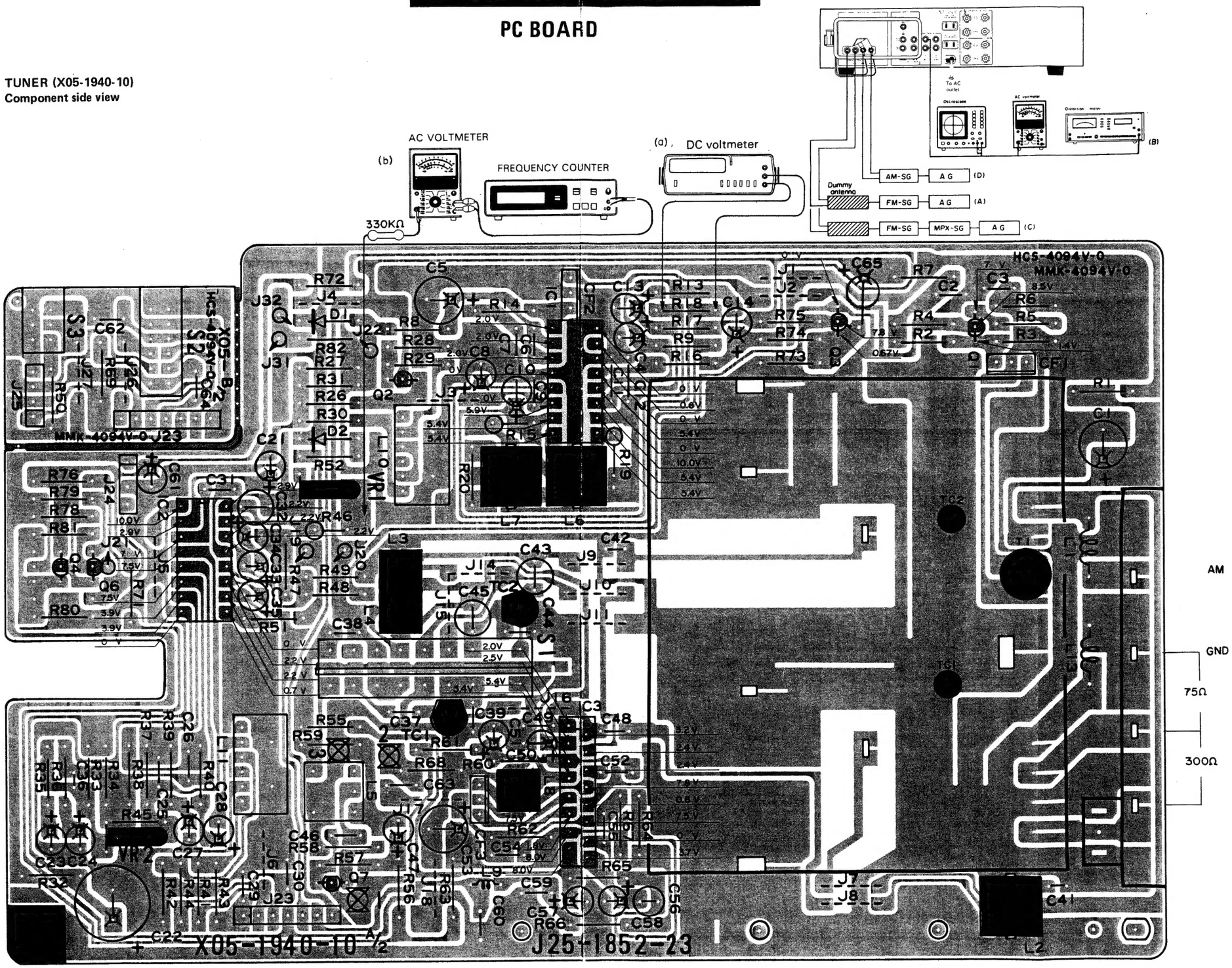
Beim Wechseln des Krafttransistors oder des Antriebstransistors, vergewissern Sie Sich immer daß der Leerlaufstrom 20 ~ 100 mA ist.

<PRÜFUNGSGANG>

(1) Den Lautstärkeknopf aufs Minimum stellen.
(2) Ein Gleichsannungsmesser zwischen den Kollektorer von Q15 (Q16) und Q17 (Q18) anschließen.
(3) Sich vergewissern, daß der Gleichspannungsmesser 8,8 ~ 44 mV anzeigt.
(4) Falls die Anzeige des Gleichspannungsmesser nicht wie angegeben ist, den Wiederstand zwischen der Basis und dem Emitter von Q9 (Q10) ändern um den angegebenen Wert zu erhalten.

PC BOARD

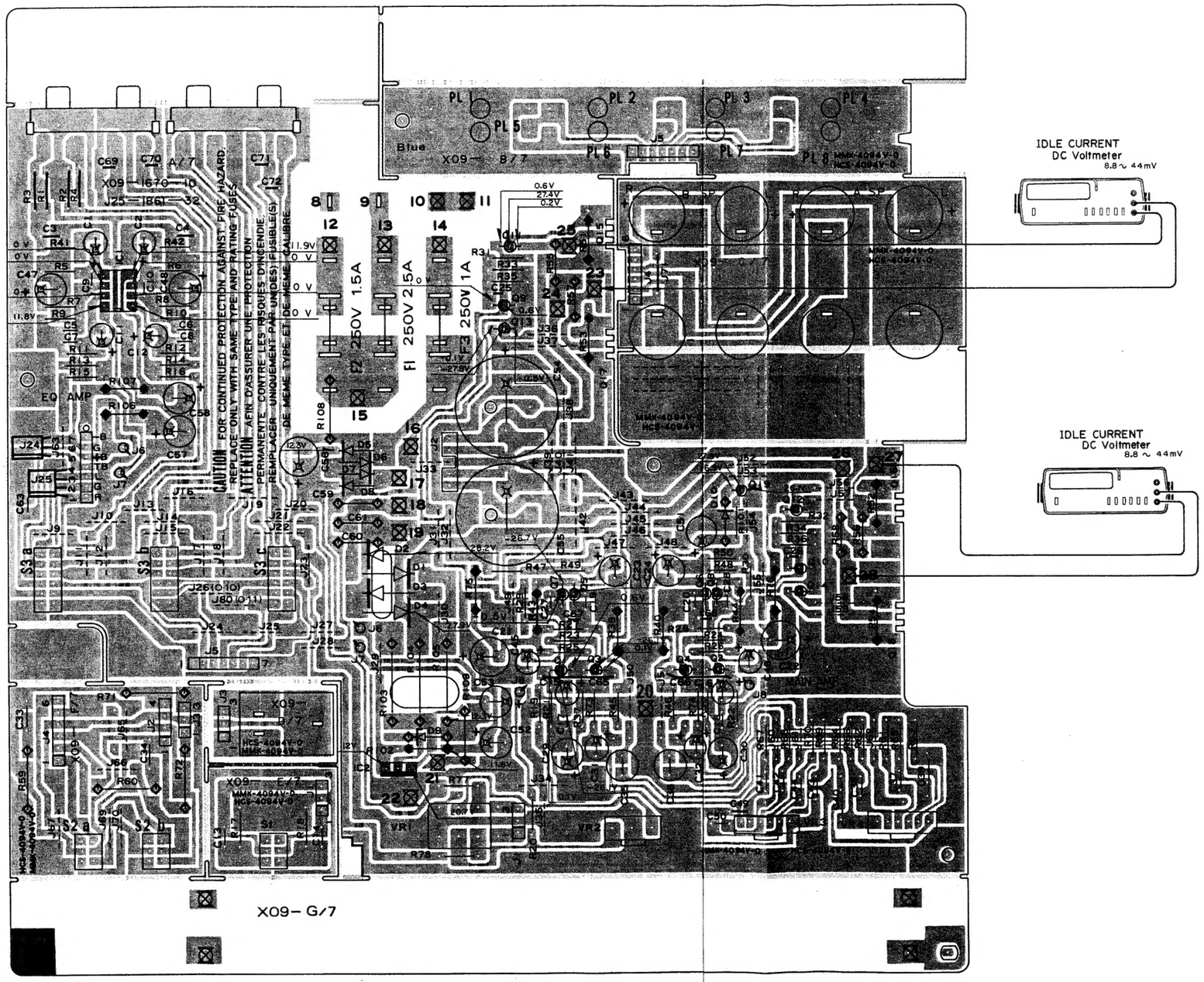
TUNER (X05-1940-10)
Component side view



Refer to the schematic diagram for the values of resistors and capacitors.
The PC board drawing is viewing from the side easy to check.

PC BOARD

AUDIO (X09-1670-11)
Component side view



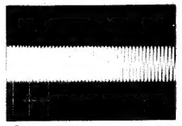
Refer to the schematic diagram for the values of resistors and capacitors.
The PC board drawing is viewing from the side easy to check.

WAVEFORMS AT CHECK POINTS

① IF out
0.5 μs/cm, 10 mV/cm

② Q1 base
0.5 μs/cm, 10 mV/cm

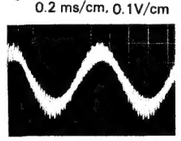
③ Q1 collector
0.5 μs/cm, 10 mV/cm



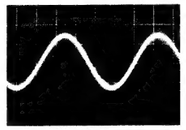
④ IC1-1
0.5 μs/cm, 10 mV/cm

⑤ IC1-6
0.5 μs/cm, 50 mV/cm

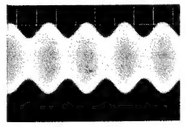
⑥ IC2-7
0.2 ms/cm, 0.1V/cm



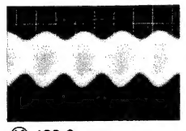
⑦ Tuner out
0.2 ms/cm, 50 mV/cm



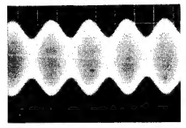
⑧ IC3-2
0.5 ms/cm, 5 mV/cm



⑨ IC3-5
0.5 ms/cm, 5 mV/cm

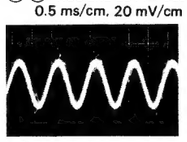


⑩ IC3-9
0.5 ms/cm, 5 mV/cm



⑪ IC3-14
0.5 ms/cm, 20 mV/cm

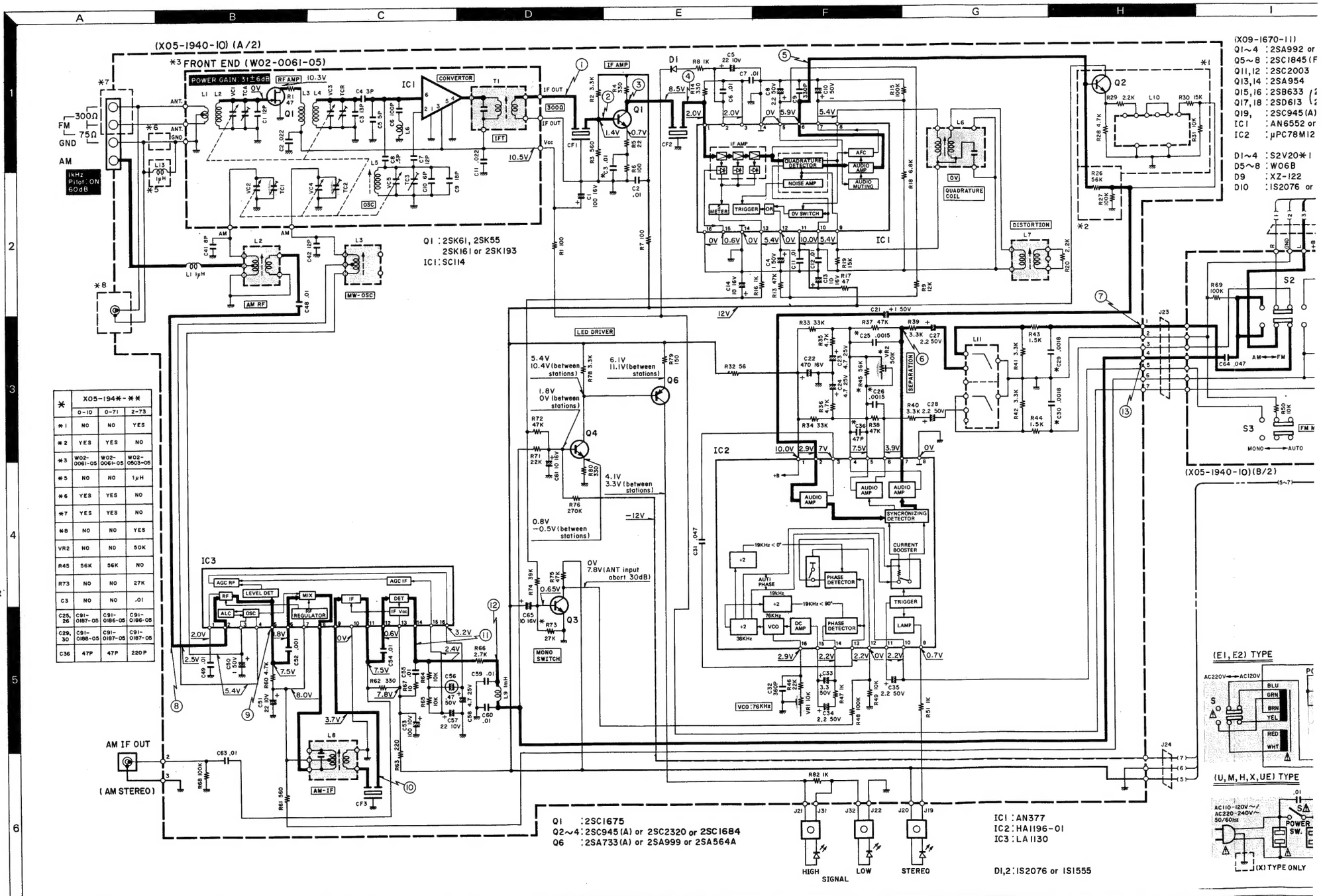
⑫⑬ R66 and L9 AM out
0.5 ms/cm, 20 mV/cm



SEMICONDUCTOR SUBSTITUTIONS	
NAME	SUBSTITUTIONS
X09-167	
Q5 ~ 8	2SC1775
Q11, 12	2SC1735
Q13, 14	2SA850
Q15, 16	2SB690 (C)
Q17, 18	2SD726 (C)
D9	Zener voltage: 12V
IC1	NJM4558

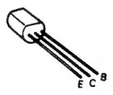
KENWOOD

AM-FM STER

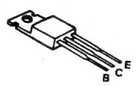


*	X05-194*-**		
	0-10	0-71	2-73
*1	NO	NO	YES
*2	YES	YES	NO
*3	W02-0061-05	W02-0061-05	W02-0503-05
*5	NO	NO	1μH
*6	YES	YES	NO
*7	YES	YES	NO
*8	NO	NO	YES
VR2	NO	NO	50K
R45	56K	56K	NO
R73	NO	NO	27K
C3	NO	NO	.01
C25, 26	C91-0187-05	C91-0186-05	C91-0186-05
C29, 30	C91-0188-05	C91-0187-05	C91-0187-05
C36	47P	47P	220P

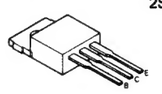
2SA564A 2SC1684
2SA733(A) 2SC1845
2SA921 2SC1980
2SA954 2SC2003
2SA992 2SC2320
2SA999 2SC828A
2SC1675 2SC945(A)



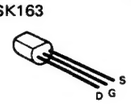
2SC633
2SC1827
2SD613



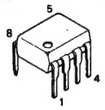
2SA769



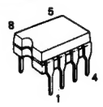
2SK136
2SK163



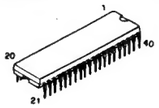
RC4558P



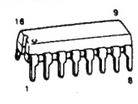
μPC4558C



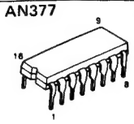
LA1130



HA1196-01

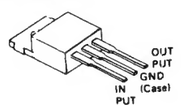


AN377



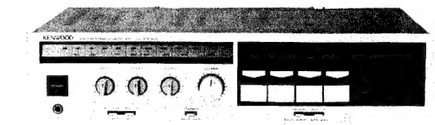
AN6552

μPC78M12H



M-FM STEREO RECEIVER

KR-910



(X09-1670-11)
Q1~4 : 2SA992 or 2SA921
Q5~8 : 2SC1845(F,E,U) or 2SC1980(S,T,U)
Q11,12 : 2SC2003 Q9,10: 2SC1845(E,U)
Q13,14 : 2SA954
Q15,16 : 2SB633 (2SA769 P type only)
Q17,18 : 2SD613 (2SC1827
Q19, : 2SC945(A) or 2SC828A or 2SC2320
IC1 : AN6552 or μPC4558C or RC4558P
IC2 : μPC78M12H

D1~4 : S2V20✱1 or GP20DL
D5~8 : W06B
D9 : XZ-122
D10 : IS2076 or IS1555

(X05-1940-10)(B/2)

(X09-1670-11) (A/6)

(X09-1670-11) (E/6)

(X09-1670-11) (B/6)

(X09-1670-11) (C/6)

(X09-1670-11) (D/6)

(X09-1670-11) (F/6)

KR-910S(K)

(E1, E2) TYPE

(U, M, H, X, UE) TYPE

(X) TYPE ONLY

✱	F1	F2	R59,60	R104	R108	C3,4	C9,10	C65,66	C67,68	C49,50, 69~72
X09-1670-11	2.5A	NO	R92-0238-05	R92-0239-05	2.2M	100P	100P	NO	220P	NO
X09-1670-82	2.5A	1.5A	4.7 1W	56 2W	NO	100P	100P	NO	NO	NO
X09-1672-72	F2.5A	F1.25A	4.7 1W	R92-0238-05	NO	220P	2200P	68P	220P	560P

SPECIFICATION

Audio Section

Power Output
30 watts* per channel minimum RMS, both channels driven at 8 ohms from 40 Hz to 20,000 Hz with no more than 0.09% total harmonic distortion.

Both Channels Driven	
into 8 ohms at 1,000 Hz	31 W+31 W
into 4 ohms at 1,000 Hz	31 W+31 W
Dynamic Power Output at 4 ohms	100 W
Total Harmonic Distortion (40 Hz to 20,000 Hz from AUX)	
rated power into 8 ohms	0.09%
1 watt power into 8 ohms	0.05%
Intermodulation Distortion (60 Hz:7 kHz = 4:1 SMPTE)	
rated power into 8 ohms	0.04%
1 watt power into 8 ohms	0.03%
Damping Factor	30 at 1 kHz, 8 ohms
Input Sensitivity/Impedance	
PHONO	2.5 mV/ 50k ohms
TAPE, AUX	150 mV/50 k ohms
Signal to Noise Ratio (A weighted)	
PHONO	72 dB for 2.5 mV input 78 dB for 5.0 mV input
TAPE, AUX	100 dB for 150 mV input
Maximum PHONO Input Level at 1,000 Hz	120 mV (RMS), THD 0.05%
Frequency Response	
PHONO RIAA Standard Curve	20 Hz to 20,000 Hz ±0.3 dB
TAPE, AUX	10 Hz to 100 kHz +0 dB, −3 dB
Tone Control	
BASS	±8 dB at 100 Hz
TREBLE	±8 dB at 10 kHz
Loudness Control (VOL. −30 dB)	+10 dB at 100 Hz
Output Level/Impedance	
TAPE REC Out (Pin)	150 mV/560 ohms

FM Tuner Section

Usable Sensitivity	10.8 dBf (1.9 μV)
50 dB Quieting Sensitivity	
Mono	17.2 dBf (4.0 μV)
Stereo	37.2 dBf (40 μV)
Signal-to-Noise Ratio at 65 dBf	
Mono	75 dB
Stereo	70 dB
Total Harmonic Distortion at 1,000 Hz	
Mono	0.1%
Stereo	0.2%
Frequency Response	30 Hz to 15,000 Hz, +0.2 dB, −0.2 dB
Capture Ratio	1.5 dB
Image Rejection Ratio	50 dB
Spurious Response Ratio	80 dB
IF Response Ratio	90 dB
Alternate Channel Selectivity	45 dB at 400 kHz
AM Suppression Ratio	65 dB
Stereo Separation Ratio	40 dB at 1,000 Hz 35 dB at 50 Hz to 10 kHz
Subcarrier Product Ratio	45 dB
Antenna Impedance	300 ohms balanced and 75 ohms unbalanced
FM Frequency Range	87.5 MHz to 108 MHz

AM Tuner Section

Usable Sensitivity	13μV
Signal-to-Noise Ratio	48 dB
Image Rejection	45 dB
Selectivity	25 dB

General

Power Consumption	1.1 A (UL and CSA) 120 W (8 ohms at rated power) 22 W (No Signal)
AC Outlet	Switched 1, Unswitched 1
Dimensions	W 440 mm (17-5/16") H 109 mm (4-19/64") D 250 mm (9-51/64")
Weight (Net)	5.2 kg (11.4 lb)
(Gross)	5.8 kg (12.8 lb)

Measured pursuant to Federal Trade Commission's Trade Regulation rule on Power Output Claims for Amplifier in U.S.A.

Kenwood follows a policy of continuous advancements in development. For this reason specifications may be changed without notice.

Kenwood poursuit une politique de progrès constants en ce qui concerne le développement. Pour cette raison, les spécifications sont sujettes à modifications sans préavis.

Kenwood strebt ständige Verbesserungen in der Entwicklung an. Daher bleiben Änderungen der technischen Daten jederzeit vorbehalten.

⚠SERVICE INFORMATION

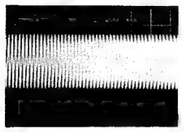
CAUTION: For continued safety, replace safety critical components only with manufacturer's recommended parts (refer to parts list).
⚠Indicates safety critical component (S).

To reduce the risk of electric shock, leakage-current or resistance measurements shall be carried out (exposed parts are acceptably insulated from the supply circuit) before the appliance is returned to the customer.

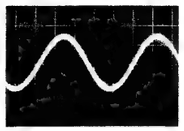
- DC voltages are as measured with a high impedance voltmeter. Values may vary slightly due to variations between individual instruments or/and units.
- Les tensions c.c. doivent être mesurées avec un voltmètre à haute impédance. Les valeurs peuvent différer légèrement du fait des variations inhérentes aux appareils et aux instruments de mesure individuels.
- Die angegebenen Gleichspannungswerte wurden mit einem hochohmigen. Voltmeter gemessen. Dabei schwanken die Meßwerte aufgrund von Unterschieden zwischen einzelnen instrumenten oder Geraten u.U. geringfügig.

WAVEFORMS AT CHECK POINTS

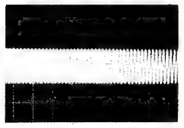
① IF out
0.5 μs/cm, 10 mV/cm



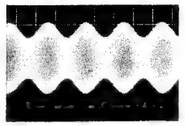
⑦ Tuner out
0.2 ms/cm, 50 mV/cm



② Q1 base
0.5 μs/cm, 10 mV/cm

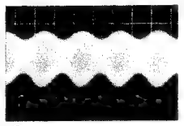


⑧ IC3-2
0.5 ms/cm, 5 mV/cm



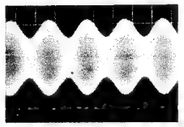
③ Q1 collector
0.5 μs/cm, 10 mV/cm

⑨ IC3-5
0.5 ms/cm, 5 mV/cm

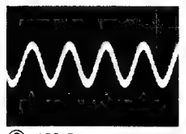


④ IC1-1
0.5 μs/cm, 10 mV/cm

⑩ IC3-9
0.5 ms/cm, 5 mV/cm



⑤ IC1-6
0.5 μs/cm, 50 mV/cm

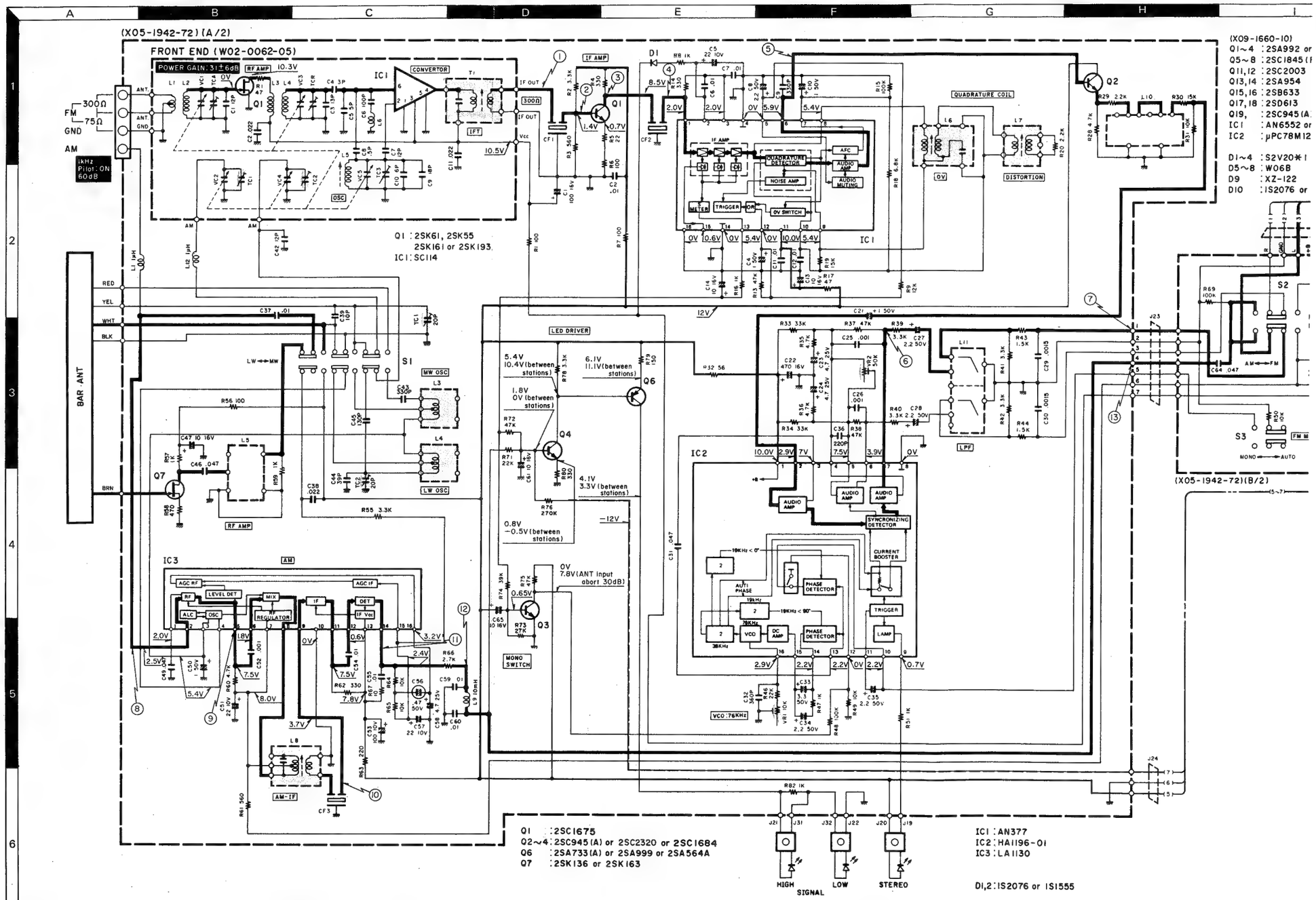


⑪ IC3-14
0.5 ms/cm, 20 mV/cm

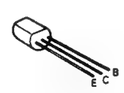
⑥ IC2-7
0.2 ms/cm, 0.1V/cm

⑫⑬ R66 and L9 AM out
0.5 ms/cm, 20 mV/cm

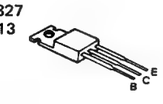
SEMICONDUCTOR SUBSTITUTIONS	
NAME	SUBSTITUTIONS
X09-167	
Q5 ~ 8	2SC1775
Q11, 12	2SC1735
Q13, 14	2SA850
Q15, 16	2SB690 (C)
Q17, 18	2SD726 (C)
D9	Zener voltage: 12V
IC1	NJM4558



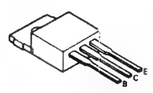
2SA564A 2SC1684
2SA733(A) 2SC1845
2SA921 2SC1980
2SA954 2SC2003
2SA992 2SC2320
2SA999 2SC828A
2SC1675 2SC945(A)



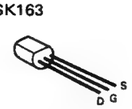
2SC633
2SC1827
2SD613



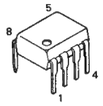
2SA769



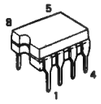
2SK136
2SK163



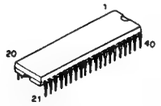
RC4558P



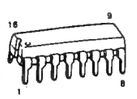
μPC4558C



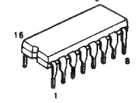
LA1130



HA1196-01

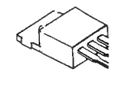


AN377



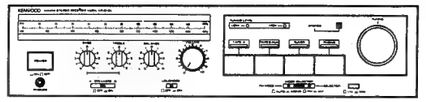
AN6552

μPC78M12H



AM-FM STEREO RECEIVER

KR-910L



SPECIFICATION

Audio section

Rated power output
- 8 ohms at 40 Hz to 20 kHz, no more than 0.09% T.H.D. (FTC)...30 W + 30 W
- 4 ohms at 63 Hz to 12.5 kHz, no more than 0.7% T.H.D. (IEC)...30 W + 30 W

Total harmonic distortion
- Rated power output into 8 ohms ...0.09%

Intermodulation distortion ...0.04%

Frequency response...10 Hz – 100 kHz +0 dB, –3 dB

S/N Weighted: Rated output power (IEC-A)
( ) = Unweighted, at 50 mV (DIN)
- PHONO...72 dB (55 dB)
- TAPE, AUX...100 dB (60 dB)

Damping factor at 8 ohms, 1 kHz ...30

Input sensitivity/impedance
- PHONO...2.5 mV/50 kΩ
- TAPE, AUX...150 mV/50 kΩ

Tone control
- Bass 100 Hz...±8 dB
- Treble 10 kHz...±8 dB

Loudness control (–30 dB)...+10 dB at 100 Hz

FM tuner section

Sensitivity at 75 ohms
- Mono: S/N 26 dB, 40 kHz dev....0.9 μV
- Stereo: S/N 46 dB, 46 kHz dev....25 μV

Limiting level
- –3 dB Point, 40 kHz dev....0.9 μV

Frequency response...30 Hz to 15 kHz, +0.2 dB, –2.0 dB

Total harmonic distortion
- Mono: 1 kHz, 40 kHz dev....0.15 %
- Stereo: 1 kHz, 46 kHz dev....0.3 %

S/N Weighted (IEC-A)
- Mono: 40 kHz dev., 1 mV input....70 dB
- Stereo: 46 kHz dev., 1 mV input....65 dB

S/N Ratio (IHF)
- Mono: 75 kHz dev., 1 mV input....75 dB
- Stereo: 75 kHz dev., 1 mV input....70 dB

FM stereo separation : 1 mV input (DIN)
- 250 Hz....38 dB
- 1 kHz....40 dB
- 6.3 kHz....35 dB
- 12.5 kHz....30 dB

Image rejection ratio....50 dB

Selectivity
- 300 kHz, 20 dB input....70 dB

IF rejection ratio....90 dB

AM suppression ratio....65 dB

Spurious response ratio....80 dB

Capture ratio....1.5 dB

MW tuner section

Sensitivity S/N 20 dB....13 μV

S/N Ratio: 1 mV input....48 dB

Image rejection ratio....45 dB

LW tuner section

Sensitivity S/N 20 dB....14 μV

S/N Ratio: 1 mV input....48 dB

Image rejection ratio....55 dB

General

Power consumption
- IEC....200 W
- Rated power at 8 ohms....120 W
- No signal....22 W

Dimensions....W 440 mm, H 109 mm, D 250 mm

Weight (net)....5.2 kg

(X09-1660-10)
Q1~4 : 2SA992 or 2SA921
Q5~8 : 2SC1845(F,E,U) or 2SC1980(S,T,U)
Q11,12 : 2SC2003 Q9,10 : 2SC1845(E,U)
Q13,14 : 2SA954
Q15,16 : 2SB633
Q17,18 : 2SD613
Q19, : 2SC945(A) or 2SC828A or 2SC2320
IC1 : AN6552 or μPC4558C or RC4558P
IC2 : μPC78M12H

D1~4 : S2V20*1 or GP20DL
D5~8 : W06B
D9 : XZ-122
D10 : IS2076 or IS1555

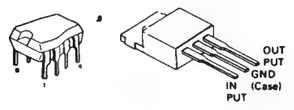
(X09-1672-72)(A/6)
(X09-1672-72)(E/6)
(X09-1672-72)(B/6)
(X09-1672-72)(C/6)
(X09-1672-72)(D/6)
(X09-1672-72)(F/6)
(X05-1942-72)(B/2)

(E1, E2) TYPE
(T) TYPE

*	F1	C3,4	C9,10	C49,50, 69~72	C65,66	C67,68
X09-1670-52	NO	100P	100P	NO	NO	NO
X09-1672-72	2.5A	220P	2200P	560P	68P	220P

KR-910L

IN6552 μPC78M12H



⚠SERVICE INFORMATION

CAUTION: For continued safety, replace safety critical components only with manufacturer's recommended parts (refer to parts list).
⚠Indicates safety critical component (S).

To reduce the risk of electric shock, leakage-current or resistance measurements shall be carried out (exposed parts are acceptably insulated from the supply circuit) before the appliance is returned to the customer.

- DC voltages are as measured with a high impedance voltmeter. Values may vary slightly due to variations between individual instruments or/and units.
- Les tensions c.c. doivent être mesurées avec un voltmètre à haute impédance. Les valeurs peuvent différer légèrement du fait des variations inhérentes aux appareils et aux instruments de mesure individuels.
- Die angegebenen Gleichspannungswerte wurden mit einem hochohmigen. Voltmeter gemessen. Dabei schwanken die Meßwerte aufgrund von Unterschieden zwischen einzelnen instrumenten oder Geraten u.U. geringfügig.

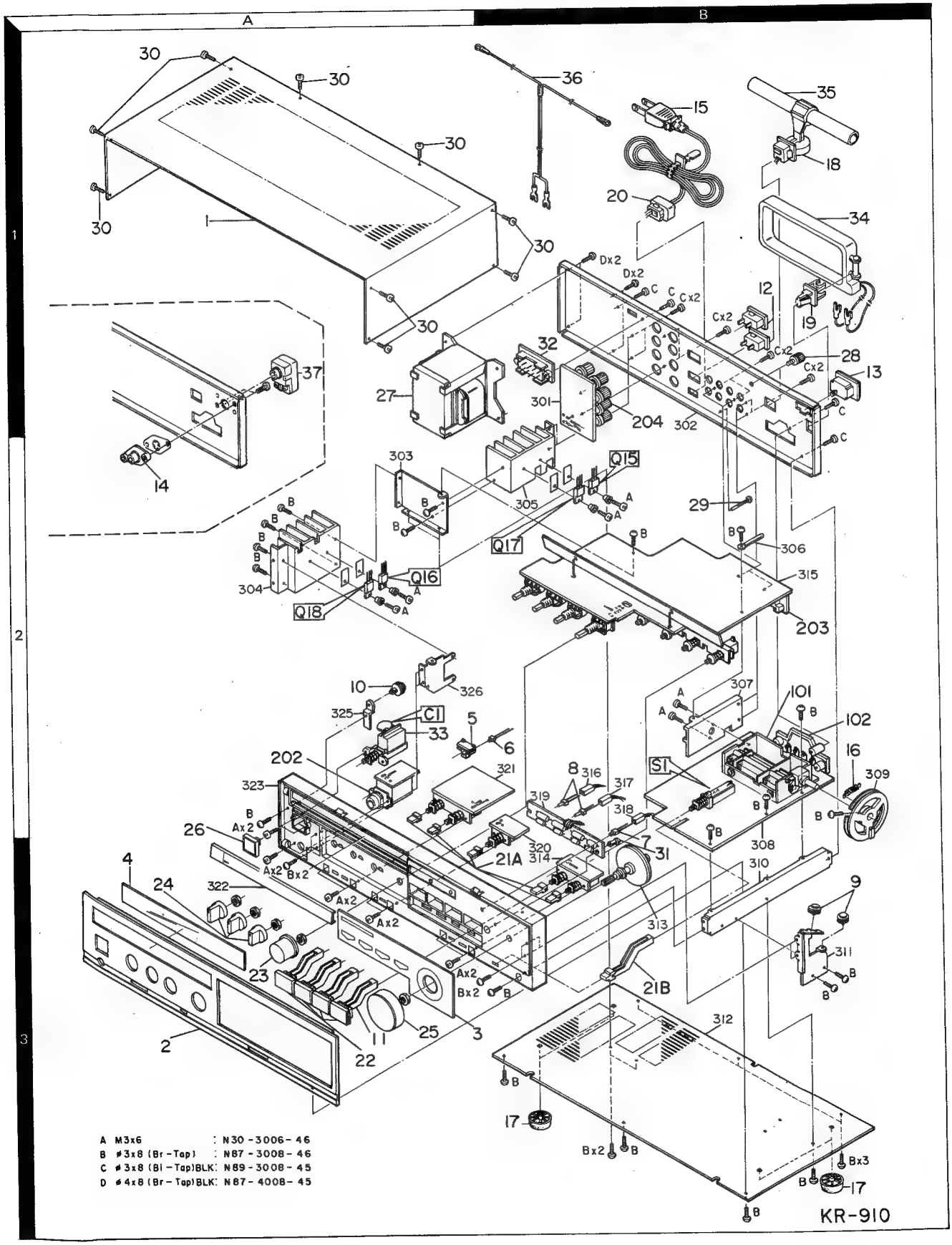
Kenwood follows a policy of continuous advancements in development. For this reason specifications may be changed without notice.

Kenwood poursuit une politique de progrès constants en ce qui concerne le développement. Pour cette raison, les spécifications sont sujettes à modifications sans préavis.

Kenwood strebt ständige Verbesserungen in der Entwicklung an. Daher bleiben Änderungen der technischen Daten jederzeit vorbehalten.

EXPLODED VIEW

Exploded No. larger than 300 are not supplied.



PARTS LIST

* New Parts
Parts without **Parts No.** are not supplied.
Les articles non mentionnes dans le **Parts No.** ne sont pas fournis.
Teile ohne **Parts No.** werden nicht geliefert.

Ref. No. 参照番号	Address 位置	New Parts 新	Parts No. 部品番号	Description 部品名／規格	Destination 仕向	Remarks 備考
			KR-910/910L			
1	1A		A01-0450-13	METALLIC CABINET		
2	3A		A20-3534-02	FRONT PANEL	KPUMH	
2	3A		A20-3534-02	FRONT PANEL	UEXE	
2	3A		A20-3535-02	FRONT PANEL	T	
2	3A		A20-3536-02	FRONT PANEL	E	
3	3A		B03-0296-03	DRESSING PANEL		
4	3A		B10-0390-04	FRONT GLASS		
5	2A		B21-0056-04	DIAL POINTER		
6	2B		B30-0442-05	LED (RED)		
7	3B		B30-0475-05	LED (RED)		
8	2B		B30-0493-05	LED		
-			B46-0092-03	WARRANTY CARD	K	
-			B46-0093-03	WARRANTY CARD	P	
-			B46-0094-03	WARRANTY CARD	UHUE	
-			B46-0095-03	WARRANTY CARD	UHUE	
-			B46-0096-03	WARRANTY CARD	X	
-			B46-0097-03	WARRANTY CARD	T	
-			B46-0098-03	WARRANTY CARD	EE	
-			B50-4749-00	INSTRUCTION MANUAL	KPUMH	
-			B50-4749-00	INSTRUCTION MANUAL	UEX	
-			B50-4750-00	INSTRUCTION MANUAL	PMXE	
-			B50-4751-00	INSTRUCTION MANUAL	E	
-			B50-4752-00	INSTRUCTION MANUAL	M	
-			B50-4753-00	INSTRUCTION MANUAL	T	
-			B50-4754-00	INSTRUCTION MANUAL	E	
-			B50-4755-00	INSTRUCTION MANUAL	E	
-			B59-0092-00	SERVICE DIRECTORY	UHUE	
⚠ C001			C91-0023-05	CERAMIC 0.01UF AC250V	UMHUE	
⚠ C001			C91-0023-05	CERAMIC 0.01UF AC250V	X	
⚠ C001			C91-0079-05	CERAMIC 0.01UF AC125V	KPTEE	
⚠ C002-004			CK45F1H103Z	CERAMIC 0.01UF Z	E	
9	3B		D15-0174-05	PULLEY ASSY		
10	2A		D15-0175-05	PULLEY ASSY		
11	3A		D21-0486-04	EXTENSION SHAFT		
⚠ 12	1B		E03-0036-05	AC OUTLET	KUMH	
⚠ 12	1B		E03-0036-05	AC OUTLET	UEX	
⚠ 12	1B		E03-0041-05	AC OUTLET	P	
13	1B		E04-0004-05	COAXIAL RECEPTACLE	TE	
14	2A		E04-0006-05	COAXIAL RECEPTACLE	E	
⚠ 15	1B		E30-0181-05	AC POWER CORD	K	
⚠ 15	1B		E30-0459-05	AC POWER CORD	EE	
⚠ 15	1B		E30-0587-15	AC POWER CORD	T	
⚠ 15	1B		E30-0649-05	AC POWER CORD	X	
⚠ 15	1B		E30-0780-05	AC POWER CORD	P	
⚠ 15	1B		E30-0812-05	AC POWER CORD	UMHUE	
16	2B		G01-0044-14	EXTENSION SPRING		
-			H01-4782-04	CARTON BOX	KPUMH	
-			H01-4782-04	CARTON BOX	UEXE	
-			H01-4783-04	CARTON BOX	T	
-			H01-4784-04	CARTON BOX	E	
-			H10-1573-02	POLYSTYRENE FOAMED FIXTURE		

E: Scandinavia & Europe H:Audio Club K: USA P: Canada ⚠ Indicates safety critical component.
S: South Africa U: PX(Far East, Hawaii) T: England (KR-910L)
UE: AAFES(Europe) X: Australia M: Other Areas E: Scandinavia & Europe (KR-910L)

PARTS LIST

* New Parts
Parts without **Parts No.** are not supplied.
Les articles non mentionnes dans le **Parts No.** ne sont pas fournis.
Teile ohne **Parts No.** werden nicht geliefert.

	Ref. No. 参照番号	Address 位置	New Parts 新	Parts No. 部品番号	Description 部品名／規格			Destination 仕向	Remarks 備考
	-			H12-0091-04	PACKING FIXTURE				
	-			H20-0462-04	PROTECTION COVER				
	-			H25-0078-04	PROTECTION BAG				
	17	3B		J02-0343-05	FOOT				
	18	1B		J19-0507-05	ANTENNA HOLDER (BAR)			TE	
	19	1B		J19-0564-05	ANTENNA HOLDER (LOOP)			UEXE	
	19	1B		J19-0564-05	ANTENNA HOLDER (LOOP)			KPUMH	
⚠	20	1B		J42-0083-05	BUSHING			KPUMH	
⚠	20	1B		J42-0083-05	BUSHING			UETEE	
⚠	20	1B		J42-0085-05	BUSHING			X	
	21A	3A,3B		K27-0601-04	KNOB				
	21B	3B		K27-0602-04	KNOB(LW)			TE	
	22	3A		K27-0711-14	KNOB				
	23	3A		K29-0456-04	KNOB(VOLUME)				
	24	3A		K29-0457-04	KNOB(TONE)				
	25	3A		K29-0487-04	KNOB(TUNING)				
	26	3A		K29-1176-04	KNOB ASSY(POWER)				
⚠	27	1A		L01-2301-05	POWER TRANSFORMER			K	
⚠	27	1A		L01-2302-05	POWER TRANSFORMER			T	
⚠	27	1A		L01-2305-05	POWER TRANSFORMER			UMHUE	
⚠	27	1A		L01-2305-05	POWER TRANSFORMER			X	
⚠	27	1A		L01-2306-05	POWER TRANSFORMER			EE	
⚠	27	1A		L01-2307-05	POWER TRANSFORMER			P	
	28	1B		N08-0128-05	SCREW				
	29	2B		N09-0292-05	SCREW				
	30	1A,1B		N09-0377-05	SCREW				
	31	3B		N29-0033-05	PUSH REVET				
⚠	32	1B		S31-2050-05	SLIDE SWITCH			XEE	
⚠	32	1B		S31-2050-05	SLIDE SWITCH			UMHUE	
⚠	33	2A		S40-1067-05	PUSH SWITCH(POWER)				
	34	1B		T90-0104-15	LOOP ANTENNA			UEXE	
	34	1B		T90-0104-15	LOOP ANTENNA			KPUMH	
	35	1B		T90-0112-05	BAR ANTENNA			TE	
	36	1B		T90-0121-05	FEEDER ANTENNA				
	37	1A		T90-0122-05	ANTENNA ADAPTOR			E	
	Q15 ,16			2SA769	TRANSISTOR			P	
	Q15 ,16			2SB633	TRANSISTOR			KUMHE	
	Q15 ,16			2SB633	TRANSISTOR			UEXTE	
	Q17 ,18			2SC1827	TRANSISTOR			P	
	Q17 ,18			2SD613	TRANSISTOR			KUMHE	
	Q17 ,18			2SD613	TRANSISTOR			UEXTE	
				TUNER (X05-1940-10)					
	C2			CK45F1H103Z	CERAMIC	0.01UF	Z	E	
	C3			CK45F1H103Z	CERAMIC	0.01UF	Z		
	C6 ,7			CK45F1H103Z	CERAMIC	0.01UF	Z		
	C9			CK45B1H331K	CERAMIC	330PF	K		
	C11 ,12			CK45F1H103Z	CERAMIC	0.01UF	Z		
	C25 ,26			C91-0186-05	CERAMIC	0.001UF	K	XTEE	
	C25 ,26			C91-0187-05	CERAMIC	0.0015UF	K	KPUMH	
	C25 ,26			C91-0187-05	CERAMIC	0.0015UF	K	UE	
	C29 ,30			C91-0187-05	CERAMIC	0.0015UF	K	XTEE	
	C29 ,30			C91-0188-05	CERAMIC	0.0018UF	K	KPUMH	

E: Scandinavia & Europe H:Audio Club K: USA P: Canada ⚠ Indicates safety critical component.
S: South Africa U: PX(Far East, Hawaii) T: England (KR-910L)
UE : AAFES(Europe) X: Australia M: Other Areas E: Scandinavia & Europe (KR-910L)

PARTS LIST

* New Parts
Parts without **Parts No.** are not supplied.
Les articles non mentionnes dans le **Parts No.** ne sont pas fournis.
Teile ohne **Parts No.** werden nicht geliefert.

Ref. No. 参照番号	Address 位置	New Parts 新	Parts No. 部品番号	Description 部品名／規格	Destination 仕向	Remarks 備考
C29 ,30			C91-0188-05	CERAMIC 0.0018UF K	UE	
C31			C91-0141-05	CERAMIC 0.047UF M		
C32			CQ09FS1H361J	POLYSTY 360PF J		
C36			CC45SL1H221J	CERAMIC 220PF J	TEE	
C36			CC45SL1H470J	CERAMIC 47PF J	KPUMH	
C36			CC45SL1H470J	CERAMIC 47PF J	UEX	
C37			C91-0139-05	CERAMIC 0.01UF M	TE	
C38			CK45F1H223Z	CERAMIC 0.022UF Z	TE	
C39			CC45SL1H100D	CERAMIC 10PF D	TE	
C40			CQ92M1H152K	MYLAR 0.0015UF K	KPUMH	
C40			CQ92M1H152K	MYLAR 0.0015UF K	UE	
C41			CC45SL1H080D	CERAMIC 8PF D	KPUMH	
C41			CC45SL1H080D	CERAMIC 8PF D	UEXE	
C42			CC45UJ1H120J	CERAMIC 12PF J	KPUMH	
C42			CC45UJ1H120J	CERAMIC 12PF J	UE	
C42			CC45UJ1H060D	CERAMIC 6PF D	XTEE	
C43			CQ09FS1H331J	POLYSTY 330PF J	TE	
C44			CC45CH1H390J	CERAMIC 39PF J	TE	
C45			CQ09FS1H131J	POLYSTY 130PF J	TE	
C46			C91-0141-05	CERAMIC 0.047UF M	TE	
C48 ,49			C91-0139-05	CERAMIC 0.01UF M	KPUMH	
C48 ,49			C91-0139-05	CERAMIC 0.01UF M	UEXE	
C49			C91-0141-05	CERAMIC 0.047UF M	TE	
C52			CK45B1H102K	CERAMIC 0.001UF K		
C54 ,55			C91-0139-05	CERAMIC 0.01UF M		
C56			CE04BW1HR47M	NP-ELEC 0.47UF 50WV		
C59 ,60			C91-0139-05	CERAMIC 0.01UF M		
C62			CK45F1H223Z	CERAMIC 0.022UF Z		
C63			C91-0139-05	CERAMIC 0.01UF M	KPUMH	
C63			C91-0139-05	CERAMIC 0.01UF M	UEXE	
C64			C91-0141-05	CERAMIC 0.047UF M		
TC1 ,2			CD5-0303-05	TRIMMER CAPACITOR	TE	
102	2B		E20-0232-05	TERMINAL BOARD	E	
102	2B		E20-0439-05	TERMINAL BOARD KPUMH	UEXTE	
CF1			L72-0126-05	CERAMIC FILTER	TEE	
CF1 ,2			L72-0136-05	CERAMIC FILTER	KPUMH	
CF1 ,2			L72-0136-05	CERAMIC FILTER	UEX	
CF2			L72-0131-05	CERAMIC FILTER	TEE	
CF3			L72-0099-05	CERAMIC FILTER		
L1			L40-1092-45	FIXED INDUCTOR(1.0UH)		
L2			L31-0458-05	MW RF COIL	KPUMH	
L2			L31-0458-05	MW RF COIL	UEXE	
L3			L32-0255-05	MW OSC COIL		
L4			L32-0256-05	LW OSC COIL	TE	
L5			L79-0119-05	LC FILTER	TE	
L6			L30-0316-05	FM IFT		
L7			L30-0317-05	FM IFT		
L8			L30-0362-05	AM IFT		
L9			L40-1021-45	FIXED INDUCTOR	KPUMH	
L9			L40-1021-45	FIXED INDUCTOR	UEXE	
L9			L40-1035-05	FIXED INDUCTOR	TE	
L10			L79-0125-05	LC FILTER	TEE	
L11			L79-0140-05	LC FILTER		
L12			L40-1092-41	FIXED INDUCTOR (1.0UH)	TE	
L13			L40-1092-45	FIXED INDUCTOR	E	

E: Scandinavia & Europe H:Audio Club K: USA P: Canada ⚠Indicates safety critical component.
S: South Africa U: PX(Far East, Hawaii) T: England (KR-910L)
UE : AAFES(Europe) X: Australia M: Other Areas E: Scandinavia & Europe (KR-910L)

PARTS LIST

* New Parts
Parts without **Parts No.** are not supplied.
Les articles non mentionnes dans le **Parts No.** ne sont pas fournis.
Teile ohne **Parts No.** werden nicht geliefert.

Ref. No. 参照番号	Address 位置	New Parts 新	Parts No. 部品番号	Description 部品名／規格			Destination 仕向	Remarks 備考
R1			RD14GB2E101J	FL-PROOF RD	100	J 2E		
R17			RD14GB2E470J	FL-PROOF RD	47	J 2E		
R32			RD14GB2E560J	FL-PROOF RD	56	J 2E		
VR1			R12-3302-05	TRIMMING POT. (10KB)				
VR2			R12-4302-05	TRIMMING POT. (50KB)			TE	
S1			S40-6014-05	PUSH SWICH			TE	
S2 ,3			S42-2045-05	PUSH SWITH				
D1 ,2			1S1555	DIODE				
D1 ,2			1S2076	DIODE				
IC1			AN377	IC				
IC2			HA1196-01	IC				
IC3			LA1130	IC				
Q1			2SC1675	TRANSISTOR				
Q2			2SC1684	TRANSISTOR			TE	
Q2			2SC2320	TRANSISTOR			TE	
Q2			2SC945(A)	TRANSISTOR			TE	
Q3 -4			2SC1684	TRANSISTOR				
Q3 -4			2SC2320	TRANSISTOR				
Q3 -4			2SC945(A)	TRANSISTOR				
Q6			2SA564A	TRANSISTOR				
Q6			2SA733(A)	TRANSISTOR				
Q6			2SA999	TRANSISTOR				
Q7			2SK136	FET			TE	
Q7			2SK163	FET			TE	
101	2B		W02-0061-05	FRONT-END			KPUMH	
101	2B		W02-0061-05	FRONT-END			UEX	
101	2B		W02-0062-05	FRONT-END			TE	
101	2B		W02-0503-05	FRONT-END			E	
AUDIO (X09-1670-11)								
PL1 -4			B30-0372-05	LAMP				
PL5 -8			B30-0374-05	LAMP				
C1 ,2			CE04AW1E3R3M	LL-ELEC	3.3UF	25WV		
C3 ,4			CC45SL1H101J	CERAMIC	100PF	J	KPUMH	
C3 ,4			CC45SL1H101J	CERAMIC	100PF	J	UEXT	
C3 ,4			CC45SL1H221J	CERAMIC	220PF	J	EE	
C5 ,6			CQ92M1H123J	MYLAR	0.012UF	J		
C7 ,8			CQ92M1H332J	MYLAR	0.0033UF	J		
C9 ,10			CC45SL1H101J	CERAMIC	100PF	J	KPUMH	
C9 ,10			CC45SL1H101J	CERAMIC	100PF	J	UEXT	
C9 ,10			CK45B1H222K	CERAMIC	0.0022UF	K	EE	
C13 ,14			CQ92M1H183K	MYLAR	0.018UF	K		
C15 ,16			CE04AW1H010M	LL-ELEC	1UF	50WV		
C17 ,18			CC45SL1H181J	CERAMIC	180PF	J		
C19 ,20			CC45SL1H221J	CERAMIC	220PF	J		
C25 ,26			CC45SL1H470J	CERAMIC	47PF	J		
C27 ,28			CC45SL1H220J	CERAMIC	22PF	J		
C33 ,34			CQ92M1H473M	MYLAR	0.047UF	M		
C35 ,36			CE04BW1C100M	NP-ELEC	10UF	16WV		
C37 ,38			CQ92M1H183K	MYLAR	0.018UF	K		
C39 ,40			CQ92M1H823K	MYLAR	0.082UF	K		
C41 ,42			CQ92M1H472K	MYLAR	0.0047UF	K		
C43 ,44			CQ92M1H223K	MYLAR	0.022UF	K		
C49 ,50			CK45B1H561K	CERAMIC	560PF	K	EE	

E: Scandinavia & Europe H:Audio Club K: USA P: Canada ⚠ Indicates safety critical component.
S: South Africa U: PX(Far East, Hawaii) T: England (KR-910L)
UE : AAFES(Europe) X: Australia M: Other Areas E: Scandinavia & Europe (KR-910L)

PARTS LIST

" New Parts
Parts without **Parts No.** are not supplied.
Les articles non mentionnes dans le **Parts No.** ne sont pas fournis.
Teile ohne **Parts No.** werden nicht geliefert.

Ref. No. 参照番号	Address 位置	New Parts 新	Parts No. 部品番号	Description 部品名／規格	Destination 仕向	Remarks 備考
C54 ,55			C90-0472-05	ELECTRO 4700UF 35WV		
C59 -61			CK45E2H103P	CERAMIC 0.01UF P		
C63 ,64			CK45F1H103Z	CERAMIC 0.01UF Z		
C65 ,66			CC45SL1H680J	CERAMIC 68PF J	EE	
C67 ,68			CC45SL1H221J	CERAMIC 220PF J	KPEE	
C69 -72			CK45B1H561K	CERAMIC 560PF K	EE	
202	2A		E11-0085-05	PHONE JACK		
203	2B		E13-0433-05	PHONO JACK		
204	1B		E20-0815-05	TERMINAL BOARD(SPEAKER)		
⚠ F1			F05-2521-05	FUSE (2.5A)	UMHX	
⚠ F1			F05-2521-05	FUSE (2.5A)	UE	
⚠ F1			F05-2528-05	FUSE (2.5A)	EE	
⚠ F1			F05-2529-05	FUSE (2.5A)	KP	
⚠ F2			F05-1227-05	FUSE (1.25A)	TEE	
⚠ F2			F05-1521-05	FUSE (1.5A)	UMHX	
⚠ F2			F05-1521-05	FUSE (1.5A)	UE	
⚠ F3			F05-1023-05	FUSE (1.0A)	UMHX	
⚠ F3			F05-1023-05	FUSE (1.0A)	UE	
⚠ F3			F05-1024-05	FUSE (1.0A)	KP	
⚠ F3			F06-1021-05	FUSE (1.0A)	TEE	
-			J13-0041-05	FUSE CLIP	KPUMH	
-			J13-0041-05	FUSE CLIP	UEX	
-			J13-0054-05	FUSE CLIP	TEE	
R29			RD14GB2E221J	FL-PROOF RD 220 J 2E		
R40			RD14GB2E221J	FL-PROOF RD 220 J 2E		
R43 ,44			RD14GB2E101J	FL-PROOF RD 100 J 2E		
R51 -54			RD14GB2E331J	FL-PROOF RD 330 J 2E		
R55 -58			R92-0166-05	METAL-PLATE 0.22 K 3D		
R59 ,60			RS14GB3A4R7J	FL-PROOF RS 4.7 J 3A	UMHUE	
R59 ,60			RS14GB3A4R7J	FL-PROOF RS 4.7 J 3A	XTEE	
R59 ,60			R92-0238-05	RN 4.7 J 3A	KP	
R71 ,72			RS14GB3A271J	FL-PROOF RS 270 J 3A		
R75 ,76			RD14GB2E820J	FL-PROOF RD 82 J 2E		
R102			RD14GB2E4R7J	FL-PROOF RD 4.7 J 2E		
R103			RS14GB3D221J	FL-PROOF RS 220 J 3D		
R104			RS14GB3D560J	FL-PROOF RS 56 J 3D	UMHX	
R104			RS14GB3D560J	FL-PROOF RS 56 J 3D	UE	
R104			R92-0239-05	RN 56 J 3D	KPTEE	
R105			RS14GB3D821J	FL-PROOF RS 820 J 3D		
R106,107			RD14GB2E101J	FL-PROOF RD 100 J 2E		
R108			R92-0173-05	RC 2.2M M 2H		
R109			RC05GF2H272K	RC 2.7K K 2H		
VR1			R06-5068-05	VARIABLE RESISTOR(100K)VOLUME		
VR2			R01-5034-05	VARIABLE RESISTOR(200K)BALANCE		
VR3 ,4			R06-5069-05	VARIABLE RESISTOR(100K)TONE		
S1			S40-2126-05	PUSH SWITCH (LOUDNESS)		
S2			S42-2046-05	PUSH SWITCH (SP SELECTOR)		
S3			S42-4016-05	PUSH SWITCH (INPUT SELECTOR)		
D1 -4			GP20DL	DIODE		
D1 -4			S2V20*1	DIODE		
D5 -8			W06B	DIODE		
D9			XZ-122	DIODE		

E: Scandinavia & Europe H:Audio Club K: USA P: Canada ⚠ Indicates safety critical component.
S: South Africa U: PX(Far East, Hawaii) T: England (KR-910L)
UE : AAFES(Europe) X: Australia M: Other Areas E: Scandinavia & Europe (KR-910L)

PARTS LIST

* New Parts
Parts without **Parts No.** are not supplied.
Les articles non mentionnes dans le **Parts No.** ne sont pas fournis.
Teile ohne **Parts No.** werden nicht geliefert.

Ref. No. 参照番号	Address 位置	New Parts 新	Parts No. 部品番号	Description 部品名／規格	Destination 仕向	Remarks 備考
D10			1S1555	DIODE		
D10			1S2076	DIODE		
IC1			AN6552	IC		
IC1			RC4558P	IC		
IC1			UPC4558C	IC		
IC2			UPC78M12H	IC		
Q1 -4			2SA921	TRANSISTOR		
Q1 -4			2SA992	TRANSISTOR		
Q5 -8			2SC1845(F,E,U)	TRANSISTOR		
Q5 -8			2SC1980(S,T,U)	TRANSISTOR		
Q9 ,10			2SC1845(E,U)	TRANSISTOR		
Q11 ,12			2SC2003	TRANSISTOR		
Q13 ,14			2SA954	TRANSISTOR		
Q19			2SC2320	TRANSISTOR		
Q19			2SC828A	TRANSISTOR		
Q19			2SC945(A)	TRANSISTOR		

E: Scandinavia & Europe H:Audio Club K: USA P: Canada ⚠ Indicates safety critical component.
S: South Africa U: PX(Far East, Hawaii) T: England (KR-910L)
UE : AAFES(Europe) X: Australia M: Other Areas E: Scandinavia & Europe (KR-910L)